

WHAT IS CLAIMED IS:

1. A motor comprising:

a rotor;

a stator located external to the rotor and including main and auxiliary windings;

an outer motor case; and

a plurality of isolators positioned between the stator and outer motor case and configured to enhance forces applied to a foundation due to excitation of the auxiliary windings.

2. The motor of claim 1 wherein the isolators are of an elastomeric material.

3. The motor of claim 1 wherein the auxiliary windings generate forces, and

wherein the outer motor case attaches to a foundation and reacts the forces generated by the auxiliary windings.

4. The motor of claim 1 wherein the isolators are symmetrically positioned about an axis of the motor.

5. The motor of claim 1 wherein the isolators are positioned to be in shear for radial and axial deflections and in compression for rotation about an axis of the motor.

6. An electromechanical machine comprising:
 - a rotor;
 - a stator located external to the rotor and including main and auxiliary windings;
 - linear bearings configured to constrain a motion of the stator to an axial direction; and
 - a plurality of isolators connected to the stator and configured to enhance axial forces applied to a foundation due to excitation of the auxiliary windings.

7. The electromechanical machine of claim 6 wherein the isolators are formed of an elastomeric material.

8. A method for attenuating a force exerted by a stator in an electromechanical machine, comprising:

constraining a motion of the stator to an axial direction using linear bearings;
and
attenuating a force exerted by the stator in the axial direction using one or more isolators.

9. The method of claim 8 wherein the isolators are formed of an elastomeric material.

10. A method for implementing a motor including a rotor and a stator, comprising:
 - providing an outer motor case, the outer case reacting torque applied by the stator to the rotor; and
 - providing a plurality of isolators between the stator and the outer motor case, the isolators being configured to deflect the torque.

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